



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento, CA 94244-2460

- Course:** Fire Apparatus Driver/Operator 1A: Emergency Vehicle Operations (2008) CFSTES
- Hours:** 40
- Designed For:** Fire service emergency response personnel
- Description:** The 2008 Fire Apparatus Driver/Operator 1A training has been updated to reflect current California Vehicle Code (CVC) requirements and the 2009 NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. The course requires two textbooks and a student supplement. The textbooks are the current edition of the California Commercial Driver Handbook published by the Department of Motor Vehicles and the second edition of IFSTA's Pumping Apparatus Driver/Operator Handbook. The student supplement is published by State Fire Training. This course provides the student with information on driver responsibilities, recognized standards, and related laws for fire apparatus. Topics include basic inspections, documentation, maintenance, and troubleshooting fire apparatus, and techniques on driving and positioning fire apparatus. Each student also has the opportunity to increase his or her driving skills during simulated driving conditions.
- Prerequisites:** California drivers license, class B, fire fighter restricted (minimum), Fire Fighter I training recommended
- Certification:** Fire Apparatus Driver/Operator I
- Class Size:** 25
- Restrictions:** This course requires a site with adequate materials and equipment to deliver the training according to the course outline.

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ California Commercial Driver Handbook		Current	DMV
▪ Pumping Apparatus Driver/Operator Handbook		Second	CFCA or FPP
▪ Student Supplement		2008	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ California Commercial Driver Handbook		Current	DMV
▪ Certification Exam		2008	SFT
▪ Instructor Guide		2008	SFT
▪ PowerPoint Slides on CD-ROM (Optional)		2008	SFT
▪ Pumping Apparatus Driver/Operator Handbook		Second	CFCA or FPP
▪ Student Supplement		2008	SFT

VENDORS		
CFCA	California Fire Chief's Association Bookstore, 727 Center Street NE, Salem, OR 97301 www.calchiefs.org	800-733-2314
FPP	Fire Protection Publications, 930 North Willis, Stillwater, OK 74078-8045 www.ifsta.org	800-654-4055
SFT	State Fire Training Bookstore, PO Box 944246, Sacramento 94244 www.fire.ca.gov	916-445-8158

FIRE APPARATUS DRIVER/OPERATOR 1A: EMERGENCY VEHICLE OPERATIONS COURSE OUTLINE

Course Objectives: to provide the student with...

- a) Information on driver responsibilities, recognized standards, and related laws for fire apparatus.
- b) Information and techniques on basic inspections, documentation, maintenance, and troubleshooting fire apparatus.
- c) Information and techniques on driving and positioning fire apparatus.

FIRE APPARATUS DRIVER/OPERATOR 1A: EMERGENCY VEHICLE OPERATIONS COURSE OUTLINE

- d) The opportunity to increase their driving skills during simulated driving conditions.

Course Content:..... 40:00

Unit 1: Responsibilities, Standards, and Laws

1-1	Orientation and Administration	1:00
1-2	Fire Apparatus Driver/Operator Responsibilities	0:45
1-3	Legal Aspects of Emergency and Nonemergency Driving.....	1:00

Unit 2: Inspection, Basic Maintenance, Documentation, and Troubleshooting

2-1	Introduction to Inspection, Basic Maintenance, and Troubleshooting	0:30
2-2	Inspection and Basic Maintenance of The Driver and Crew Areas, Apparatus Body, and Compartmentation	0:15
2-3	Inspection and Basic Maintenance of The Frame, Axles, Steering and Suspension Systems, Driveline, Wheels, and Tires	0:15
2-4	Troubleshooting The Frame, Axles, Steering and Suspension Systems, Driveline, Wheels, And Tires	0:30
2-5	Inspection and Basic Maintenance of Engine Systems	0:45
2-6	Troubleshooting Engine Systems.....	0:30
2-7	Inspection and Basic Maintenance of The Transmission and Clutch	0:15
2-8	Troubleshooting The Transmission and Clutch	0:15
2-9	Inspection and Basic Maintenance of The Starting, Charging, and Other Electrical Systems	0:30
2-10	Troubleshooting The Starting, Charging, and Other Electrical Systems	2:00
2-11	Inspection and Basic Maintenance of Brake Systems	1:30
2-12	Troubleshooting Brake Systems	1:00
2-13	Inspection and Basic Maintenance of Auxiliary and Accessory Equipment.....	0:15
2-14	Inspection Documentation and Reports.....	0:15
2-15	Pretrip Inspection Procedures	2:00

Unit 3: Driving Practices

3-1	Accident Statistics and Liability.....	0:30
3-2	Principles of Defensive Driving	2:00
3-3	Driving Apparatus to Incidents	1:00
3-4	Principles of Off-Road Driving.....	1:00
3-5	Principles of Braking and Stopping	0:30
3-6	Principles of Steering and Load Control.....	1:30
3-7	Driving During Adverse Weather Conditions.....	0:15
3-8	Positioning Apparatus	1:00

Unit 4: Mandatory Driving Exercises

4-1	Introduction to The Mandatory Driving Exercises.....	0:30
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Unit 5: Optional Driving Exercises

5-1	Introduction to The Optional Driving Exercises	0:15
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Practice and Testing The Driving Exercises..... 14:00

Unit Tests..... 3:00

Course Review and Certification Exam..... 1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento, CA 94244-2460

Course:	Fire Apparatus Driver/Operator 1B: Pump Operations (2008)	CFSTES
Hours:	40	
Designed For:	Fire service emergency response personnel	
Description:	The 2008 Fire Apparatus Driver/Operator 1B training has been updated to reflect the 2009 NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications and requires a textbook and student supplement. The textbook is the second edition of IFSTA's Pumping Apparatus Driver/Operator Handbook. The student supplement is published by State Fire Training. This course provides the student with information on pump construction and theory of pump operations. Topics include: methods for performing basic hydraulics and techniques on basic inspections, documentation, maintenance, and troubleshooting fire pumps. Each student also has the opportunity to increase his or her pumping skills during simulated pumping conditions.	
Prerequisites:	California drivers license, Class B, fire fighter restricted (minimum), Fire Fighter I training recommended	
Certification:	Fire Apparatus Driver/Operator I	
Class Size:	25	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Pumping Apparatus Driver/Operator Handbook		Second	CFCA or FPP
▪ Student Supplement		2008	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		2008	SFT
▪ Instructor Guide		2008	SFT
▪ PowerPoint Slides on CD-ROM (Optional)		2008	SFT
▪ Pumping Apparatus Driver/Operator Handbook		Second	CFCA or FPP
▪ Student Supplement		2008	SFT

VENDORS		
CFCA	California Fire Chief's Association Bookstore, 727 Center Street NE, Salem, OR 97301 www.calchiefs.org	800-733-2314
FPP	Fire Protection Publications, 930 North Willis, Stillwater, OK 74078-8045 www.ifsta.org	800-654-4055
SFT	State Fire Training Bookstore, PO Box 944246, Sacramento 94244 www.fire.ca.gov	916-445-8158

FIRE APPARATUS DRIVER/OPERATOR 1B: PUMP OPERATIONS COURSE OUTLINE

Course Objectives: to provide students with...

- a) Information on pump construction and theory of pump operations.
- b) Methods for performing basic hydraulics.
- c) Information and techniques on inspections, documentation, maintenance, and troubleshooting.
- d) The opportunity to increase their pumping skills during simulated pumping conditions.

Course Content:..... 40:00

Unit 1: Responsibilities, Standards, and Laws

- 1-1 Orientation and Administration 1:30
- 1-2 Fire Apparatus Driver/Operator Responsibilities 0:30

FIRE APPARATUS DRIVER/OPERATOR 1B: PUMP OPERATIONS COURSE OUTLINE

Unit 2: Fire Pump Construction and Theory

2-1	Types of Fire Pumps	0:45
2-2	Pump Mounting and Drive Arrangements	0:30
2-3	Pump Piping and Valves	0:15
2-4	Automatic Pressure Control Devices	0:15
2-5	Priming Devices	0:15
2-6	Pump Panel Instrumentation	0:15
2-7	Auxiliary Cooling Devices	0:15

Unit 3: Hydraulics

3-1	Basic Hydraulic Terminology and Symbols	0:30
3-2	Mathematics Review	1:00
3-3	Characteristics of Water and Principles of Pressure	0:30
3-4	Principle Features of Water Systems	0:15
3-5	Nozzle Theory	0:30
3-6	Calculating Gallons Per Minute	0:30
3-7	Principles of Friction Loss	0:15
3-8	Friction Loss Formulas and Calculations	4:00
3-9	Pump Discharge Pressure	0:30
3-10	Fireground Hydraulic Calculations	1:00

Unit 4: Inspection, Maintenance, and Troubleshooting

4-1	Inspecting The Pump Drive Systems	0:15
4-2	Inspecting The Pump Priming Systems	0:15
4-3	Inspecting The Pump Pressure Control Systems	0:15
4-4	Pump Service Testing	0:45
4-5	Maintenance of The Pump and Control Systems	1:00

Unit 5: Pump Practices

5-1	Making The Pump Operational (From Tank)	0:30
5-2	Transitioning to an External Water Supply	0:30
5-3	Operating From a Hydrant	0:30
5-4	Principles and Practices of Drafting Operations	0:30
5-5	Principles of Relay Pump Operations	1:30
5-6	Troubleshooting Pump Operations	1:00
5-7	Principles of Tandem Pump Operations	0:15
5-8	Principles of Dual Pumping Operations	0:15
5-9	Principles and Practices of Foam Operations	1:00
5-10	Sprinkler and Standpipe Support	0:30

Unit 6: Pumping Exercises

6-1	Introduction to The Pumping Exercises	0:30
	Practice and Testing the Pumping Exercises	13:00
	Unit Tests	2:00
	Course Review and Certification Exam	2:00